



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

Sustenance, nourishment, and cultivation

Citation for published version:

Jeffery, L & Rotter, R 2016, 'Sustenance, nourishment, and cultivation: Plants as living cultural heritage for dispersed Chagossians in Mauritius, Seychelles, and the UK', *Journal of the Royal Anthropological Institute*, vol. 22, no. 2, pp. 296-313. <https://doi.org/10.1111/1467-9655.12402>

Digital Object Identifier (DOI):

[10.1111/1467-9655.12402](https://doi.org/10.1111/1467-9655.12402)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Published In:

Journal of the Royal Anthropological Institute

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



Sustenance, nourishment, and cultivation: plants as living cultural heritage for dispersed Chagossians in Mauritius, Seychelles, and the UK

LAURA JEFFERY *University of Edinburgh*

REBECCA ROTTER *University of Edinburgh*

Applying a critical heritage studies approach to plants, this article explores how plant knowledge and use, plant exchange, and plant symbolism and materiality feature in the social life of the dispersed Chagossian community in Mauritius, Seychelles, and the UK. First, plant use helps to sustain collective knowledge in new environmental conditions and social settings. Second, plant exchange nourishes kinship and other social relationships within the extended community. Third, plant symbolism and materiality cultivate nostalgic links to idealized homelands in the context of community dispersal. Nevertheless, the capacity of plants to contribute to these social processes is limited by challenges to intergenerational knowledge transmission across time and space, and by environmental, financial, and regulatory constraints on plant migration. The article argues that for the displaced Chagossian community, plants are living cultural heritage with social potential (albeit constrained) in the context of dislocation and loss, ongoing suffering, and geographical dispersal.

From ethnobotany to plants as living cultural heritage

Ethnobotanical studies of relationships between people and plants record plant knowledge and use in communities around the world, often focusing on the medicinal and nutritive properties and uses of plants (see Bennett & Prance 2000; Haselmair, Pirker, Kuhn & Vogl 2014; Ladio 2001; Pirker, Haselmair, Kuhn, Schunko & Vogl 2012; Reyes-Garcia *et al.* 2013; Smith-Hall, Larsen & Pouliot 2012). Such studies catalogue the plant species used by a particular group of people, detail the uses to which they are put, identify categories of users, note changes in pharmacopoeias and their causes, or report processes of botanical knowledge transmission. In other words, they conceive of plants principally as material resources with particular physical and phytochemical properties which are utilized by people for practical purposes. The anthropological record attests to a variety of additional material, sensory, and symbolic relationships between people

and plants, and anthropologists have criticized those ethnobotanical accounts which decontextualize local knowledge (Ellen 2006: S10; Hsu 2010: 1). Additionally, the ethnobotanical literature has often evinced what Clifford (2008) termed the 'salvage paradigm': endeavours to record and preserve knowledge and practices (and plant species) perceived to be threatened by destructive historical (or biological or cultural or technological) forces (Ellen 2006: S2). This is most clearly reflected in Nazarea's proposal for 'memory banking': 'the collection and documentation of indigenous knowledge and technologies, including uses, preferences and evaluation criteria associated with traditional varieties of crops' (1996: 1). The argument goes that just as the genetic information coded in plant germplasm can be stored in seed banks, cultural information possessed by elderly cultivators is an important form of heritage that should be preserved for posterity, and as part of efforts to maintain biodiversity. Even ethnobotanists who acknowledge the symbolic importance of plants tend to view botanical resources and knowledge through the salvage paradigm.

The heritage movement, rooted in a modern concern to document and preserve sites, monuments, cultural objects, and memories (Harrison 2013), traditionally also shared this salvage paradigm, as reflected in the principles of international organizations such as UNESCO (2012). As Rowlands and De Jong (2007: 17) argue, heritage spaces such as the heritage site, the museum, and the archive are perceived as symbols of modernity, providing a sense of permanence to counter loss, rupture, and displacement. In other words, heritage practices often attempt to fix objects, practices, meanings and identities in place, and to safeguard against erosion from the passage of time. However, heritage scholars are increasingly engaged with critiques of the salvage paradigm, and their focus has shifted from tangible objects to the intangible processes enabling (or precluding) their production (Bortolotti 2007). Critical heritage studies sees heritage as a resource which subaltern people can use to define themselves, display their group membership, and assert geographical belonging (Smith 2006). It contends that heritage is a process of selecting and privileging certain memories and memorial artefacts for preservation, and repressing and rejecting others (Rowlands & De Jong 2007: 16), which allows people to rework the meanings of the past according to the demands of the present (Smith 2006: 4, 49). As Smith (2006: 3) points out, tangible elements such as places and objects are heritage not because they have inherent value, but because of the intangible social processes and activities that take place at, around and through them, of which they become a part.

In this article, we examine the meanings ascribed to plants, botanical knowledge, and plant use through a critical heritage lens. Our goal is neither to fix nor to preserve botanical knowledge, but rather to examine what plants can do for people who have experienced forced displacement from their homeland, a loss of tangible heritage, and disrupted social ties. We do this by exploring the social life of plants among members of the dispersed Chagossian community living in Mauritius, Seychelles, and the UK. First, we look at the plant knowledge that migrants carry with them and how they sustain collective knowledge and adapt plant use in response to new environmental conditions. Second, we consider how plant exchange can nourish social relationships with family and others in the dispersed community. Third, we examine how plant symbolism and materiality can cultivate nostalgic links to an idealized homeland in the context of community dispersal.¹ We also touch upon two limitations on the capacity for plants to fulfil these roles: firstly the challenges of transmitting knowledge to the younger generations who have been born outwith the homeland, and secondly environmental

and regulatory constraints on plant migration. Our argument is that for the displaced community in question, plants are living cultural heritage – in the sense that heritage is a process – with social potential in the context of displacement and loss, ongoing suffering, and geographical dispersal.

The Chagos Archipelago: migrating people and plants

The Chagos islands in the middle of the Indian Ocean were unpopulated by humans prior to European colonial expansion in the region from the late eighteenth century onwards, when French planters brought enslaved labourers mostly from mainland East Africa and Madagascar via Mauritius. The Chagos Archipelago was administered as a dependency of colonial Mauritius. The Colony of Mauritius and its dependencies – including Chagos and Seychelles – were transferred to British control during the Napoleonic Wars; Seychelles became a separate crown colony in 1903. Throughout the settled history of the Chagos islands, coconut plantations were the economic base and main source of employment. Also known as the Oil Islands, they relied almost entirely on the production of copra (dried coconut flesh) exported for the extraction of coconut oil that was refined for energy and used in the production of soap (among other products) in Mauritius and beyond. Chagos islanders working in the plantations received rations of coconut products and imported staples such as rice, lentils, maize, and salt; they also consumed local fish, crustaceans, green sea turtles, seabirds, wildfowl, poultry, pigs, and fruit and vegetables grown in their own kitchen gardens (Jeffery 2013: 306–7; Le Chartier 1991: 96–9). Islanders grew a wide range of edible plants, including cabbage; many varieties of greens; sweet potato; plantain; breadfruit; manioc; yam; bilimbi; maize; tomato and aubergine; pumpkin and courgette; bitter gourd, snake gourd, and bottle gourd; pepper and chilli; lemon and lime; Seville orange and grapefruit; Malay rose apple, custard apple, and monkey's apple; mango; melon and watermelon; pineapple; papaya; guava; soursop; and seven varieties of banana. The sandy soil lacked sufficient topsoil for carrots and potatoes (but cf. Bourne 1886: 387; Moresby & Elwon 1841: 259).

In his monograph *Limuria*, Robert Scott, then the British Governor of Mauritius, noted that the islands had an uncertain future owing to the rise of vegetable oils, which were more accessible and cheaper than coconut oil (1961: 291–3), although it turned out that this was not the only threat. In 1965, the UK government excised Chagos from Mauritius to form part of the British Indian Ocean Territory (BIOT) before granting independence to Mauritius in 1968 and to Seychelles in 1976. In 1966 the UK government made the Chagos Archipelago available for the defence purposes of the UK and US, and since 1971 the largest Chagos island of Diego Garcia has been the site of a major US overseas military base. Successive Mauritian governments have claimed sovereignty of the Chagos Archipelago since 1980, but the UK's response is that Chagos will be returned to Mauritian sovereignty only when it is no longer required for defence purposes. Between 1965 and 1973 the UK government depopulated the archipelago; over this period as a whole, between 1,328 and 1,522 islanders ended up in Mauritius, and 232 in Seychelles (Gifford & Dunne 2014: 46).

Since their displacement, Chagossian groups have campaigned for adequate compensation and the right of return to Chagos. The UK government awarded limited compensation to Chagos islanders (born on the Chagos Archipelago) living in Mauritius (but not Seychelles) in 1972 and in 1982, when the compensation package included money and the option to receive land (contributed by the Mauritian government)

and/or small houses on purpose-built housing estates. Islanders born on Chagos and most of their second-generation descendants were awarded UK citizenship under the British Overseas Territories Act in 2002, but spouses and subsequent generations of descendants are not automatically eligible for UK citizenship. Over two thousand people from the extended Chagossian community are estimated to have moved to the UK, where they live in the largest concentrations in Crawley (West Sussex), Manchester, and Greater London, although by far the largest concentration, totalling around seven hundred surviving Chagos islanders and several thousand of their descendants, still live in Mauritius. A series of court cases brought on behalf of the Chagossian community failed to establish their right of return to Chagos. In 2014, the UK government commissioned a resettlement feasibility study while simultaneously defending the no-fishing Marine Protected Area (MPA) established around the Chagos Archipelago in 2010, which is being contested both by Chagossians and by the Mauritian government. In 2015, an Arbitral Tribunal at the United Nations Permanent Court of Arbitration found unanimously that the declaration of the MPA was incompatible with the UK government's obligations to Mauritius under the United Nations Convention on the Law of the Sea. Meanwhile, the Supreme Court in London is expected to deliver its verdict on an application for judicial review of the MPA in early 2016.

This article draws principally on research conducted since 2011 as part of a project on debates about environmental knowledge concerning the Chagos Archipelago, although it also draws on relevant material from ethnographic fieldwork conducted since 2002 with the extended Chagossian community, which comprises displaced Chagos islanders and their descendants born outwith Chagos. During ethnographic fieldwork in Mauritius and the UK, we visited Chagossians' kitchen gardens, went food shopping with them, prepared and ate food together, and received treatment for minor ailments by community healers deploying traditional remedies. As part of a specific focus on plants, we asked about the use of edible and medicinal plants in Chagos, Mauritius, Seychelles, and the UK, including recollections of environmental changes and changing practices. In some interviews we also deployed two illustrated guides to edible and medicinal plants of the Indian Ocean (Gurib-Fakim 2007; 2009) as an elicitation device. The photographs therein frequently helped our respondents to identify more species, but as a corollary the material generated during these conversations was perhaps less detailed because respondents were keen to turn pages quickly to see what was next, whereas during conversations without visual aids they dwelt on fewer species in more depth. Respondents' enthusiasm for discussing plants was striking: Chagos islanders' faces lit up when we explained that we were interested to learn about the plants they used on Chagos, and some interviews lasted several hours. Conversations about plants enabled people to explore memories of the physical character of the islands and everyday aspects of life, and to assert their authority by conveying specialized and extensive knowledge. Each of our Chagossian interviewees identified several dozen plants that they either used themselves or knew that other people had used as a raw material in a wide range of domestic and economic activities: as medicine, food, fuel, and animal feed; to make tools and handicrafts; and to build houses and boats.

Medicinal plant use in the sustenance of collective knowledge amongst migrants

Anthropologists have devoted considerable attention over the past two decades to the ethical, ideological, methodological, and terminological challenges in attempting

to distinguish indigenous knowledge (IK) or traditional ecological or environmental knowledge (TEK) from 'scientific' or 'biomedical' knowledge (see, e.g., Dove 2006: 195-6; Ellen, Parkes & Bicker 2000; Lauer & Aswani 2009; Nazarea 2006: 321-3; Sillitoe, Bicker & Pottier 2002). Our intention is neither to recap nor to revisit these debates, but rather to consider how plants feature in migrants' attempts to sustain, transmit, and adapt their collective knowledge in the context of geographical dispersal from the homeland. As several contributors to an edited volume on the topic (Pieroni & Vandebroek 2007) have reported, migrants often continue to use traditional healthcare strategies to treat minor ailments, but tend to use a smaller number of plants and herbs in their new societies than they used in their home societies, and are sometimes constrained in their use of certain species owing to the space limitations of urban living, unfavourable growing conditions, legislation against importation, or the unavailability, high cost, or poor quality of specimens sold in the new society (Ceuterick, Vandebroek, Torry & Pieroni 2007: 157, 160-2; Ososki, Balick & Daly 2007: 29-30, 35; Palaniswamy 2007: 99; Viladrich 2007: 68-9; see also Pieroni, Zaman, Ayub & Torry 2010: 123). Plant species that are unavailable may be substituted with other, more 'global species', such as garlic, camomile, mint, eucalyptus, aloe vera, and citrus fruits (Ceuterick *et al.* 2007: 160).

Several studies found a high correspondence between the self-medication of minor ailments like flus, colds, and respiratory complaints, but also that common health conditions in the home societies had been replaced in the new societies with other conditions such as diabetes and high cholesterol, which necessitated different treatments (Palaniswamy 2007: 90-1; Vandebroek *et al.* 2007: 59-60; see also Pieroni *et al.* 2010: 126-7). An increasing preference for biomedical healthcare amongst younger generations was associated with a desire for fast-acting treatment rather than waiting for traditional remedies to take effect (Ceuterick *et al.* 2007: 161; see also Pieroni *et al.* 2010: 124-5). More recent work similarly highlights selective abandonment and innovation in use of species and practices, according to the environment, social conditions, and healthcare system in the new country, migrants' local and transnational social networks, and the ease of plant importation (Pieroni *et al.* 2010; Pirker *et al.* 2012).

We also sought to capture some of the changes in the use of plants across place and time, although we were unable to observe such changes directly given the passage of time since the depopulation of Chagos. Instead, we asked Chagos islanders and their children and grandchildren in Mauritius and the UK to reflect upon their use of plants before and after migration from Chagos and from Mauritius or Seychelles, and the ways in which knowledge about plants is transmitted. They indicated continuities and innovations in their use of plants, but also increasing constraints upon access to certain plants and the transmission of botanical knowledge. Chagos islanders identified over one hundred plant species which they used on Chagos, fifty-five of which had medicinal uses. Certain medicinal species were very widely used: aloe vera (*Aloe barbadensis* in Latin, known as *sandout* or *marzanbon* in Kreol), water hemp (*Ayapana triplinervis*, or *ayapana*), farmer's friends (*Bidens pilosa*, or *lavilbag*), native dodder (*Cassytha filiformis*, or *lalyan sanfan*), Madagascar rosy periwinkle (*Catharantus roseus*, or *saponer/roz amer*), coconuts (*Cocos nucifera*, or *koko*), lemons and limes (*Citrus limon* and *Citrus aurantifolia*, or *sitron* and *limon*), lemongrass (*Cymbopogon citatus*, or *sitronel*), beach morning glory or goat's foot (*Ipomoea pes-caprae*, or *batatran*), air plant (*Kalanchoe pinnata*, or *soudefaf*), bird's nest fern (*Asplenium nidus*, or *lalangvas*), mint (*Mentha x piperita*, or *lamant*), dwarf sensitive (*Mimosa pudica*, or *sansitiv*), bitter gourd (*Momordica charantia*, or *margoz*), Indian mulberry (*Morinda citrifolia*, or *bwa*

torti/noni), castor oil plant (*Ricinus communis*, or *palma kristi*), Madagascar spur plant (*Plectranthus madagascariensis*, or *baum de perou*), and ginger (*Zingiber officinalis*, or *zinzam*).

Chagos islanders described in detail their knowledge of the application of such plants to aid the restoration of health, and there was a high level of consistency both between the accounts of individuals, and between these and the ethnobotanical record (e.g. Gurib-Fakim, Sewraj, Gueho & Dulloo 1993; Louwe 1987; Sussman 1980; Tatayah 2011). They used plants to treat a variety of conditions, including respiratory illnesses such as asthma, coughs, and colds; headaches, earaches, and associated fevers; skin infections and other dermatological problems such as spots, boils, itches, ringworm, cuts, and bruises; digestive disorders such as indigestion, reflux, gas, bloating, nausea, stomach ache, diarrhoea, vomiting, intestinal worms, dysentery, and lack of appetite; inflammation of the stomach or bladder, jaundice, stones, hernia, and haemorrhoids; high blood pressure, stroke, thick blood, and anaemia; and assorted other complaints including cancer, diabetes, period pain, recovery after operations, malaise, toxic fish poisoning, stings, and swollen or aching lower limbs. In general, botanical treatments took the form of eating the plant directly, preparing and drinking a tisane of infused plant parts, preparing and bathing the body in a plant decoction or mashed and boiled plant materials, or applying plant matter to the skin by washing, rubbing, or as a poultice. Sometimes Chagossians volunteered information about how their knowledge of a plant and its medical indications and contraindications had changed over the passage of time and movement across geographical space. For instance, an elderly Chagossian man (who was an adult when he was removed from Chagos in 1973) recounted that Chagos islanders used to heat the leaves of Indian mulberry and apply them to aches and pains, and adults told children not to eat the seeds because they were thought to be poisonous; later, in Mauritius, he learned that the seeds were effective against diabetes and high blood pressure (see also Gurib-Fakim 2007: 113).

Some treatments were culturally specific cures for conditions such as fever (*esofman*) and chills (*freser*), or to prevent harm caused by spirits or witchcraft (see also Louwe 1987: 102–6; Tatayah 2011), some of which were specifically used for children. For instance, in Mauritius, tiny pimples on the skin of young breastfed babies are diagnosed as *tanbav* (impetigo) and are attributed to the mother's excessive consumption of 'hot' food (Louwe 1987: 102). In Crawley, a new-born baby deemed to have *tanbav* was fed cooling oranges instead of being treated with the cream prescribed by the doctor. And when another new-born baby in Crawley suffered from colic, his mother sent for arrowroot from Mauritius.

When speaking of the original migration from Chagos to Mauritius or Seychelles, Chagos islanders said that it was almost impossible to bring living plants or germplasm owing to the conditions under which the displacement took place: some islanders went on what they expected to be short trips to Mauritius and Seychelles only to be prevented from returning to Chagos; others were forced onto crowded ships bound for Mauritius or Seychelles with little chance to gather what few possessions they had. Nevertheless, according to Chagos islanders' accounts, this restriction on plant transportation did not significantly affect the continuity of botanical knowledge and plant use as many of the same species grew in Mauritius and Seychelles.

In her report on the healthcare needs of the displaced Chagossian community in Mauritius, Dræbel (1997: 20–5) listed the main problems affecting displaced Chagossians over the previous two decades: chronic illnesses such as diabetes, high blood pressure,

cardio-vascular diseases, and obesity (all of which have high and rising prevalence in Mauritius owing to high consumption of fatty foods, high cigarette and alcohol use, and low levels of physical exercise); transmissible diseases such as tuberculosis, diarrhoea, and hepatitis A (which are associated with poverty and contaminated water supplies); workplace accidents; physical and mental disabilities; psychiatric disorders (such as epilepsy); and chronic depression (*sagrin*) resulting from the uprooting. Dræbel (1997: 30-3) noted that Chagossians – like others in Mauritius and Seychelles (see Gurib-Fakim *et al.* 1993: 184; Matatiken *et al.* 2011: 69; Sussman 1980: 262) – continued to combine healthcare strategies, consulting a combination of doctors and traditional healers, and deploying a combination of biomedical, traditional, and homemade plant-based remedies.

Some of our participants advocated the medicinal use of plants with reference to the ethnobotanical argument (see, e.g., Gurib-Fakim 2007; Gurib-Fakim *et al.* 1993) that ‘all pills originally came from plants’, and that plants contain many active ingredients still being explored scientifically. A striking example of the reluctance to abandon botanical treatments in favour of pharmaceuticals (see Whyte, van der Geest & Hardon 2002: 74-5) was provided by Annette,² a woman in her forties of Chagossian parentage who was born and raised in Mauritius but now lives in Manchester. Annette described how in Mauritius she had once suffered from a bad case of haemorrhoids and had opted to self-administer the common treatment of beach morning glory (*batatran*), which, she said, is supposed to ‘coax the haemorrhoids back up inside the body’. She chuckled as she explained how she underwent the slightly laborious and awkward process of boiling the leaves in water and pouring this solution into a basin in which she then had to sit, soaking and washing the haemorrhoids at length. The treatment did not work as, she said, the haemorrhoids were now too big to retreat. Finally, she resorted to a trip to her doctor, to whom she explained the problem and the pain she was experiencing. Annette’s reporting of her doctor’s rather sage response produced fits of laughter during our interview: ‘Why’, he asked, ‘didn’t you just take paracetamol?’

While plant use continued after displacement to Mauritius and Seychelles, a different picture emerged of people’s access to herbal medicine after onward migration to the UK. Upon arriving, people found that many of the key species that were used in the Indian Ocean were not present because they could not survive in the British climate, or were not available on the market even if able to survive indoors. Some people pointed out that they would like to import particular plants that grow well on Indian Ocean islands – such as water hemp (*ayapana*), Madagascar rosy periwinkle (*saponer*), bird’s nest fern (*lalangvas*), firestick plant (*bwa malgas*), and various fruits – but are restricted by customs regulations and the practicalities of air travel. In many cases, where desired plant matter was found on sale in the UK, its market value was so high as to prevent regular use or consumption. When we asked Chagossians in the UK what they now use to treat common ailments in the place of plants, the answer was often paracetamol. Nevertheless, certain ‘global species’ such as citrus fruits, lemongrass, aloe vera, bitter gourd, and ginger were widely used.

We also observed innovation in plant use. Annette and both of her parents, now in their seventies, are very knowledgeable and enthusiastic about medicinal plant use. Annette told us that since migrating to the UK she has discovered that a thyme tisane with ginger and honey can be used for colds and bronchitis. During our interview, her parents spoke about using arrowroot in Chagos to treat diarrhoea and weakness. Annette had, unknowingly, discovered the same treatment herself:

I saw arrowroot in the shop. I didn't know my parents were using it. I only knew the flower in Mauritius. I use the powder when I am weak and tired. Boil the water, add a spoonful of the powder until it becomes a clear gravy. You can drink it. There's no taste unless you want to add sugar.

She also learned from her parents during the interview that on Chagos, Aztec marigold (*pisanli*) was boiled with carrot to treat jaundice and anaemia. She remarked that she had seen it in shops in the UK and would buy it and try using it. In sum, whilst structurally constrained by climate, customs regulations, and finances, Chagossian migrants are continuing to take advantage of the medicinal properties of plants about which they possess knowledge and to which they have access, as well as experimenting with new medicinal plants they encounter (cf. Bennett & Prance 2000; Pirker *et al.* 2012).

But in the context of such changes and the inevitable decline in numbers of older Chagos islanders, several of our interviewees expressed a concern about the future of medicinal plant knowledge. This was evident in a conversation with Edmond, a Chagos islander in his fifties who was displaced to Seychelles, and Lucille, who was born in Mauritius in the 1970s to Chagossian parents. Edmond and Lucille were concerned that knowledge about plants is not being passed on to the younger generations in the UK, both because young people are not interested and because the lack of appropriate plants reduces the opportunity to practise traditional medicine, and they lamented the loss of cherished Chagossian collective knowledge. Lucille said that in Mauritius people sometimes use lemon, water hemp, and camomile, but young people do not know about traditional medicine and do not bother to learn from their elders, preferring just to go to the doctor and take pills because this is quick and easy. Edmond noted that instead of using a blend of real orange and lemon juice to treat colds, young people buy an artificial lemon-flavoured drink (Lemsip). Thus people shared not only how they strive to sustain and transmit medicinal plant knowledge, but also their concerns about how displacement and migration can result in the transformation or loss of certain cultural heritage practices, including those involving plants.

Plant exchange in the nourishment of social relationships

This section examines how plant exchange connects people to other people. Recent anthropological work on allotment gardening and the exchange of houseplants in the UK has explored the role of networks of relationships in the dispersal and cultural selection of plant germplasm (Ellen & Platten 2011), shown how plant exchange can mark existing relationships or forge new relationships (Degnen 2009: 162), and suggested that the flow of germplasm can match an individual's network of social interactions (Ellen & Komáromi 2013: 4). Two recent studies (Ellen & Komáromi 2013; Ellen & Platten 2011) explore patterns of exchange of plants and plant materials in allotments and domestic settings, respectively. Both studies confirm that the physical qualities of plants and propagates – such as their life expectancy, size, durability, and ease of handling – make them more or less conducive to migration and exchange. However, equally importantly, they find that plant dissemination is inextricably linked to social networks and patterns of social interaction. For example, potted plants tend to be exchanged more often than garden plants firstly because they are more likely to be tended by women, who generally maintain more extensive social networks and use plants as gifts, and secondly because they are present in domestic spaces, where a greater degree of social interaction occurs (Ellen & Komáromi 2013: 4). Nevertheless, allotments are also important sites for the production and dispersal of plant materials and produce, either as 'free gifts', or as part of long-term gift exchange. Platten (2013: 316) suggests that the gifting of early growth

plant material is part of a cultural model that reinforces the transmission of gardening knowledge within the horticultural community of practice: the ability to give signifies gardening experience, and giving is thereby a means by which gardeners achieve social standing and reciprocate the generosity that was shown to them in their own early gardening years.

While these authors map the direction and types of plant exchanges which occur between actors, their focus is neither on the relationships between giver and receiver, nor on the role of plants in such relationships. The question that remains is: what does plant exchange do for connections and relationships between people, particularly in the context of community dispersal? It is well established that gifting objects is a means by which ties and obligations are forged between the giver and the recipient, who is expected to reciprocate in the future (Godelier 1999; Mauss 1990 [1924]). Gifted objects bear something of the identity of the giver, which the recipient acquires along with the gift itself (Mauss 1990 [1924]; Strathern 1988). At the level of cross-border exchanges between migrants, the literature on transnationalism has demonstrated that the transfer of financial remittances (i.e. capital) and 'social remittances' (i.e. norms, practices, and social capital) sustains links between sending and receiving countries and enhances (uneven) social development in the latter (King 1986; Levitt 2001; Levitt & Lamba-Nieves 2011). However, it has had much less to say about the circulation and exchange of objects in general or plants and plant materials in particular.

A notable exception is Abranches's (2014) study of 'material remittances', including food, traditional botanical medicines, and animal-derived amulets, sent from Guinea-Bissau to Portugal, and money, clothes, documents, and electrical goods, sent in the opposite direction. She argues that such giving and reciprocating sustains and reinforces relationships between dispersed family members, as well as keeping open possibilities for outward and return migration (Abranches 2014: 271). Guinean migrants in Portugal consume Guinean foods and plant medicines in an effort to prevent and treat illness and spiritual deterioration caused by migration to Europe. Their perceived benefit derives both from the fact that they are regarded as more natural and healthy than European equivalents (owing to the limited use of chemical fertilizers in Guinea-Bissau), and from their ability to offer migrants bodily protection by forging links to Guinean soil/territory (*tchon*), which constitutes a fundamental part of Guinean cosmology. Those who remain in Guinea-Bissau also benefit from material remittances in terms of increased social status, wealth, and the possibility of migrating themselves. Abranches concludes that '[t]hings sent in both directions contribute to maintaining physical, spiritual, and social well-being (the latter understood as a sign of prosperity), as do the relationships and mutual reciprocities that their movements generate' (2014: 270). Thus, although exchange can be understood in terms of the maintenance of relationships which are otherwise at risk of failing, the gifting of plants in particular may be important for diasporic communities owing to their material properties and symbolic association with place, which is tied to wellbeing.

Both Volpato, Emhamed, Saleh, Broglia, and di Lello (2007) and Cabral de Oliveira (2008) have explored the interdependence of plant use and social relations among mobile peoples. Volpato *et al.* (2007: 257) suggest that the continued practice of traditional medicine helps Sahrawian refugees in Algerian refugee camps to resist assimilation and to maintain links with their place of origin, but the acquisition of botanical resources for such medicine depends upon the maintenance of social ties with dispersed community members, including family, friends, market holders, and

travelling traders. Cabral de Oliveira (2008: 105) finds that Wajāpi women in Brazil engage in plant migration and exchange, particularly between their natal and affinal villages, and that such activity is reflected in the botanical naming system, where plants are named according to their sociological origin and introduction pathway. Consequently, each garden 'keeps alive the memory of a large body of social and kindred historical data' (Cabral de Oliveira 2008: 106). The Wajāpi love of plant diversity derives from the fact that plants come from other places and are the product of a relation of alterity, but it also sustains large networks of relationships with other people (Cabral de Oliveira 2008: 109).

Medical anthropologists have shown that medical practices – including those involving plants – have material significance for facilitating, marking, and reinforcing social relations (van der Geest, Whyte & Hardon 1996: 168). Whyte *et al.* (2002: 5) argue that as tangible, intimate, and personal objects, medicines (which may be plant-based) carry manifold meanings, such as expressing caring for others, or empowering people in the face of uncertainty. Whyte (1988) has also shown that, conversely, biomedicines may be individualizing or socially distancing, as they allow healthcare to be removed from its embeddedness in social relations. Edible and medicinal plants have long been enmeshed in patterns of social interaction and exchange amongst the Chagossian community, whether resident in Chagos, Mauritius, Seychelles, or the UK. The inhabitants of the Chagos islands had access to plots of land on which they planted food crops. Chagos islanders correlated the proximity of living quarters and the abundance of freely available food on Chagos with a community spirit of sharing. People would freely give away ripe produce from their kitchen gardens to family and friends in the knowledge that they would later receive produce from others. According to their nostalgic recollections, people did not keep track of precisely what was given and received, but expected their exchanges to even out in the long run. Thus they recalled an ideal social system of generalized reciprocity. This 'spirit of sharing' (*lespri partaz*), Chagossians reported, had become difficult to sustain owing to the chronic impoverishment and geographical dispersal of the displaced community (Jeffery 2011: 65–6). Nevertheless, Chagossians who live in houses (rather than apartment blocks) in Mauritius and Seychelles often have small gardens in which they grow edible plants that they do indeed share generously amongst neighbours, friends, and relatives, and one routinely leaves a household following a visit laden with a bunch of greens or handfuls of ripe mango, papaya, lychee, or coconut.

Many Chagossians in the UK return to Mauritius or Seychelles periodically to visit friends and relatives. They do not generally transport plant matter from the UK to Mauritius or Seychelles, but they often return to the UK bearing plant matter from Mauritius or Seychelles for distribution in the UK. They might bring foodstuffs: homemade specialities such as coconut crunch, pickles, chutneys, and compotes; deep-fried balls of yellow split peas (*gato-pima*), flatbread (*roti*), and flatbread stuffed with mashed yellow split peas (*dal pouri*) from Mauritius or rock-hard cassava cakes from Seychelles; or 'local' produce such as fresh fish, salt fish, tea, or spices, which are considered better quality than those available in the UK (even if fresh fish is frozen for the journey or the spices actually originated in the Indian subcontinent). Or they might deliver medicinal plants: a Chagossian woman in Mauritius described how she had prepared a package for her son in Crawley containing coconut roots (*rasinn koko*), barley (*lorz*), and linseed (*grin de lin*) to be heated and made into a refreshing drink to treat inflammation of the throat or stomach.

Chagossians who have visited Chagos also return bearing medicinal plants for their friends and family. The *bwa sousouri* plant (*Ochrosia parviflora*) is indigenous to Seychelles (Gurib-Fakim & Brendler 2004: 343), and apparently not present elsewhere in the Indian Ocean (Schmelzer 2008: 391), apart from Chagos. Infusions of its crushed leaves are used to cleanse the blood, to promote abortion, as a purgative and carminative, to stimulate the appetite, for abdominal pains, and to wash a woman's abdomen after childbirth (see Gurib-Fakim & Brendler 2004: 344; Schmelzer 2008: 391). Several people told us that they had brought *bwa sousouri* leaves from Cannon Point on Diego Garcia to treat diabetes and cleanse the blood of family and friends in the UK. Thus the provision of edible and medicinal plants continues to be a practice by which Chagossians mark and maintain their relationships with others in the extended Chagossian community.

Chagossian elders who prepare herbal remedies for themselves and others encounter varying degrees of receptiveness amongst their intended recipients. One Chagossian woman in her eighties explained that her children and grandchildren in Crawley refuse to join her in taking a daily dose of bitter aloe vera to ward off cancers because, as she put it, 'they don't believe in it, they have more faith in the doctor's remedies'. However, she said that they would accept her sweet, refreshing, cleansing drinks made from linseed and barley, mint, a Seychellois ironwood (*Vernonia cinerea*, or *gerivit*), or holy basil (*Ocimum tenuiflorum*, or *tokmarya*). So while biomedicines may allow healthcare to be removed from its embeddedness in social relations (Whyte 1988), the adoption of biomedicine is not necessarily at the expense of more socially embedded forms of healthcare: the two may coexist. Thus despite geographical, environmental, financial, and regulatory constraints, migrants continue to deploy plants as a form of cultural heritage that nourishes kinship and other social relationships within the extended and dispersed community.

Plant symbolism and materiality in the cultivation of links to idealized homelands

In this section, we examine anthropological explorations of botanical metaphors that illustrate a sedentary logic that roots particular people in particular places, and we show how migration both is unsettling and unsettles such assumptions. Until the eighteenth century the word 'culture' – which derives from the Latin for 'cultivation' – referred to the 'natural growth' of plants, but by the end of the nineteenth century it was applied also to individuals and societies (Clifford 1988: 337; Malkki 1992: 29; Wagner 1981: 21). Botanical concepts – native, indigenous, autochthonous, rooted – link people and cultures metaphorically to territories and soil. And the naturalization of a sedentary, rooted existence is also reflected in the languages of disjuncture used to describe human migration and displacement: transplantation and uprooting (Malkki 1992: 31). In addition to botanical metaphors, Malkki notes the performance of embodied relationships to one's homeland: out-migrants may take soil, plants, or seeds with them, and returning nationals (especially politicians) often kiss the ground when they return to 'national soil' (Malkki 1992: 27). Bardenstein (1998), Ben-Ze'ev (2004), and Braverman (2009) have explored the political deployment of trees in Israel/Palestine, where both sides have planted trees to assert their rootedness; burned down or uprooted trees planted by their political opponents; and claimed particular species as evidence of their own belonging, although the specific species seem to change over time.

Exploring the significance of plants for displaced people seeking to sustain links to their homeland, Jepson (2006) has written about gardening practices of Greek Cypriots who fled Karavas after the Turkish invasion in 1974. Soon after arrival on the refugee estates outside Nicosia, the refugees planted trees that would take many years to bear fruit, implying an urgent desire 'to re-root themselves' (Jepson 2006: 165). They continued to grow many of the same crops as they had grown in their larger plots in Karavas, and these familiar crops revived their memories of their homes, with the added nostalgia of recalling that the crops grew better in Karavas than in Nicosia (Jepson 2006: 164). Sutton (2001) and Petridou (2001) have similarly shown how Greek food evokes nostalgia about romanticized pasts and places. In the Greek village of Kalymnos, Sutton argues, narratives of food and community dovetail with memories of a past characterized by natural produce and a sharing mentality (Sutton 2001: 53-5). Greek students in the UK viewed food from Greece as flavourful, fresh, carefully selected, and prepared or cooked over time, with associations of sociality, family, and caring; in contrast, they described 'English' food as superficially pleasant yet tasteless, lacking in nutritional content, and ready-made or easily prepared so as to provide a quick, practical means to an end, which evoked social alienation (Petridou 2001: 93-4, 97). Food thus has a symbolic potential, to evoke home and the values associated with it, and to mark the boundaries between 'us' and 'them' (Petridou 2001: 98). Following these insights, we are similarly interested in how people use plants to mark connections to specific territories.

Chagos islanders refer to their displacement as uprooting (*derasinman*) and collectively self-identify as an uprooted people (*enn lepep derasine*) which has suffered from sorrow, sadness, and impoverishment (*sagrin, tristes, mizer*), living in exile (*exil*) from its natal homeland (*later natal*) (Jeffery 2011: 4), and they have actively campaigned for the right of return to Chagos. In 2006, the UK government organized a short return visit for one hundred Chagossians living in Mauritius, Seychelles, and the UK, who congregated in Mauritius to travel to Chagos by boat. The Royal Navy film of the visit shows the moments when Chagossians disembarked at the three main formerly inhabited islands – Boddam Island in the Salomon Atoll, Île du Coin in the Peros Banhos Atoll, and Diego Garcia – where they immediately prostrate themselves on the ground, recite the Lord's Prayer, sing hymns led by the two priests who accompanied the visit, and weep as they sing a popular Chagossian anthem, Ton Vié's *Peros Vert* (Green Peros).

Most years since 2006, the UK government has organized smaller-scale visits by plane. Chagossians who have been on these visits were keen to talk about the conditions on Chagos, particularly the environmental changes that the islands had undergone in the four decades since they were depopulated (see Jeffery 2013). In particular, they contrasted the overgrown coconut plantations with the absence of useful, edible, or medicinal plants that the islanders had cultivated (see Jeffery 2014). People spoke about the things that they had brought back – or had wanted to bring back – including personal or household belongings: one person managed to find her parents' former house, and brought back their kettle and bucket; another had failed to find the spot where he believed a relative had buried money before leaving Chagos. But for the most part people had wanted to bring back sand or edible plant and animal specimens, especially coconuts, coconut crabs, and fish. In 2006, people were prohibited from taking sand from Chagos, but the UK government's stance seems to have been gradually relaxed: during the most recent visits, people were evidently allowed to fish, harvest coconuts and edible greens, craft baskets out of coconut leaves, and bottle sand. One

Chagos islander in her fifties, whose house in London is decorated with coconut handicrafts and jars of sand from the islands, told us that she took some tiny cuttings of the firestick plant (*Euphorbia tirucalli*, known as *bwa malgas*) and brought them back to the UK, where she planted them outside in pots, only to lose them to the snails.

In 2009, the largest Chagossian group in Mauritius, the Chagos Refugees Group (CRG), moved to its own newly acquired spacious premises in Pointe aux Sables to the south of the capital Port Louis. The CRG nightwatchman, France Bertrand, who was born on Île du Coin in the Peros Banhos Atoll in 1943 and whose father was a gardener on Chagos, set about establishing a garden showcasing plants that had been present on the islands: five varieties of coconut, banana palms, papaya trees, passionfruit vines, and flowering medicinal plants, including the white and the pink varieties of Madagascar rosy periwinkle (*saponer blan* and *saponer roz*). For Olivier Bancoult, leader of the CRG, who was also born on Île du Coin, in 1964, the explicit purpose is to create a 'little Chagos' in Mauritius. Thus displaced Chagossians deploy migrating plants and other organic matter to display their (uprooted) roots in Chagos.

At the same time, however, displaced Chagossians also use plants that emphasize specific aspects of their lives in Mauritius or Seychelles. The most interesting example of this is *bred mouroum*, the tiny leaves of the drumstick tree (*Moringa oleifera*), which have to be laboriously plucked individually from sprigs. On Chagos, people said, *bred mouroum* was cooked as a watery soup made with oil, onion, and garlic (*bouillon*), fried with onion, garlic, salt, and chilli (*toufe*), or stewed in coconut milk (*seraz*) and served as an accompaniment to fish and rice (see Scott 1961: 232); the plant's long, slender seedpods (called drumsticks in English, or *baton mouroum* in Kreol) are cooked with yellow split peas. In Mauritius, *toufe bred mouroum* is routinely served whenever the CRG produces a typical Chagossian meal for guests or fundraising open days. In Mauritius and Seychelles alike, however, where *bred mouroum* grows wild and plentifully and is thus freely available, it is associated with extreme poverty (*mizer mizer*) and known as a poor food (*manze mizer*), so its inclusion in Chagossian cuisine in Mauritius not only marks links to the homeland, but also recalls extreme poverty suffered particularly upon arrival in Mauritius. As one Chagossian woman in her fifties put it,

Bred mouroum and papaya are the only reason that we did not die, because there was nothing else to eat, and we did not have to pay for *bred mouroum* and papaya. We lived in *mizer mizer*, we had a tin shack but rain came through the roof and we did not have any spare clothes when we got wet ... we had left all of our things behind [on Chagos]. Sometimes we managed to get food, some *bred mouroum*, but we had no oil or salt to cook it in, and even if you have food, you need to have something to cook it on, so sometimes we had to use old clothes and set them on fire.

Jeffery (2011: 116–18, 123–7) has argued elsewhere that for the Chagossian community, migration has brought about reformulations and conceptions of home: when they were resident in Mauritius, life in Mauritius was depicted as inferior to life in Chagos; when they were resident in the UK, however, life in Mauritius was depicted as having certain benefits compared to life in the UK, such as a higher quality of life. In our more recent discussions about the environment, Chagossians sometimes used plants to make similar contrasts. References to botanical abundance, taste, accessibility, and affordability were woven through a conversation with Gabriel and Reginald, two men in their forties and fifties, respectively, who were born on Chagos, spent most of their lives in Seychelles, and had recently migrated to the UK. When asked whether they now use or eat plants or

food from Seychelles, Gabriel replied that foodstuffs from Seychelles were not readily available or were too expensive in the UK. He continued:

In Seychelles, people live in nature. In England, people live outside of nature, in the house. In Mauritius and Seychelles, people live outside. You don't have to buy everything. On the way home, you pick food for your dinner. You pick *bilinbi*, it's a plant with small leaves that grows wild, like spinach, you pick coconut, so you prepare your food on the way home.

Reginald contrasted the abundance of fresh fruit on Chagos and Seychelles with the relatively expensive and poor-quality fruit in the UK, and concluded, 'I'll go back [to Chagos]. It's a better life there than here. The life is more nature. I was born there. I will get fresh fish, fresh vegetables. In this world, everything you want to buy, you have to have money'. Plants were thus used not only to mark people's sensory connections with Chagos and Mauritius or Seychelles, but also to argue for the superiority of those environments in comparison with that of the UK, owing to the perceived poor quality, scarcity, and commodification of produce in the latter. Thus migrants deploy plants nostalgically in two ways – firstly to cultivate their connections to a specific homeland, and secondly to highlight the superiority of this homeland – both of which resonate with the nostalgic deployment of other forms of cultural heritage.

A bigger picture emerging from our material is of the way in which Chagossians' relationships with plants have changed in parallel with their engagement in various economies. On Chagos, they grew, worked with, and used plants to meet a multitude of practical needs. In Mauritius and Seychelles, they may have tended small gardens and harvested wild plants, but they have become increasingly reliant on markets. In the UK, people live more urbanized, indoor life-styles with a high degree of plant commodification. Thus the community has increasingly outsourced the provision of food and healthcare, and there has been a discernible shift in both the accessibility *and* the perceived usefulness of growing plants. Nevertheless, plants remain important resources for the Chagossian community, as reflected in the accounts of native islanders and their second-generation descendants who are committed to continuity and innovation in medicinal plant use. The prevalence of herbal remedies in health food stores and the widespread availability of 'global species' means that people can sometimes (re)discover medicinal plants in unexpected places.

Conclusion

Ethnobotanists have traditionally sought to record and preserve botanical knowledge and patterns of plant use, sometimes in an effort to 'salvage', whether to enhance biodiversity, or for posterity. While we share a concern to explore and safeguard plant knowledge and use, our aim has not been to record the full range of Chagossian relationships with plants, nor to preserve Chagossian plant knowledge and use as a static repository. Indeed, our ethnographic material highlights that plant knowledge and use is not unchanging: in many cases, the people we encountered were actively innovating plant use, and developing additional knowledge of plants in their pharmacopeia in new settings. Rather, we have applied the insight from critical heritage studies that heritage is a process of selecting and valuing certain objects, artefacts, and practices, which can be creatively used for the purposes of the present. This facilitates an appreciation of plants as more than a tool or possession. They are, we argue, a form of living cultural heritage: the site of valued and embodied collective knowledge and expertise pertaining to life

on Chagos; of symbolic and material connections to significant people and places; and of practices through which specific memories can be selected for transmission to future generations. Plants are (or once were) *living* heritage not only in a biological sense, but also in the sense that knowledge and use is shifting over time and space. Chagossians creatively use plants to meet the demands of the present: plants help to sustain valued cultural practices and knowledge; to nourish social relationships within an increasingly dispersed community; and to cultivate nostalgic links to and belonging in idealized homes and homelands.

While several other objects might perform one or more of these roles, we suggest that the combination of phytochemical properties, symbolic values, and transportability makes plants particularly well suited to perform all three. At the same time, however, the capacity of plants to contribute to sustenance, nourishment, and cultivation in the lives of migrants is challenged in several ways: plants familiar from a previous environment may not thrive in the new environment, they may be prohibitively expensive, or their import may be restricted. The obstacles to the intergenerational transmission of knowledge and the maintenance of cultural practices within a dispersed community several decades after displacement from the homeland are not restricted to plant knowledge and use, but plants do illustrate some of the common problems: young people with busy working lives may feel that they do not have the time to learn how to use medicinal plants, which, anyway, they may fear will take too long to take effect compared to biomedical remedies. Rather than seeking to preserve an imagined static relationship between people and plants, we have instead sought to elucidate the social implications of obstacles and transformations alike.

NOTES

This research was funded by an Economic and Social Research Council Research Fellowship (RES-063-27-0214). We are grateful to all those Chagossians who generously shared their time and their love of plants with us, and for comments on drafts of this article from Anne Jepson, Ann Rotter, Regeneration panellists, Candlelit Seminar colleagues, and *JRAI* reviewers.

¹ We chose the terms 'sustain', 'nourish', and 'cultivate' for analytical rather than ethnographic reasons.

² In this article, most Chagossian respondents are assigned first-name pseudonyms; office-bearers are identified by their full names.

REFERENCES

- ABRANCHES, M. 2014. Remitting wealth, reciprocating health? The 'travel' of the land from Guinea Bassau to Portugal. *American Ethnologist* **41**, 261-75.
- BARDENSTEIN, C. 1998. Threads of memory in discourses of rootedness: of trees, oranges and prickly-pear cactus in Palestine/Israel. *Edebiyât: A Journal of Middle Eastern Literatures* **8**, 1-36.
- BEN-ZE'EV, E. 2004. The politics of taste and smell: Palestinian rites of return. In *The politics of food* (eds M.E. Lien & B. Nerlich, 141-60. Oxford: Berg.
- BENNETT, B.C. & G.T. PRANCE 2000. Introduced plants in the indigenous pharmacopoeia of Northern South America. *Economic Botany* **54**, 90-102.
- BORTOLOTTI, C. 2007. From objects to processes: UNESCO's 'intangible cultural heritage'. *Journal of Museum Ethnography* **19**, 21-33.
- BOURNE, G. 1886. On the island of Diego Garcia of the Chagos group. *Proceedings of the Royal Geographical Society and Monthly Record of Geography* **8**, 385-93.
- BRAVERMAN, I. 2009. Uprooting identities: the regulation of olive trees in the Occupied West Bank. *PolAR: Political and Legal Anthropology Review* **32**, 237-64.
- CABRAL DE OLIVEIRA, J. 2008. Social networks and cultivated plants: exchange of planting materials and knowledge. *Tipiti: Journal of the Society for the Anthropology of Lowland South America* **6**, 101-10.
- CEUTERICK, M., I. VANDEBROEK, B. TORRY & A. PIERONI 2007. The use of home remedies for health care and well-being by Spanish-speaking Latino immigrants in London: a reflection on acculturation. In

- Traveling cultures and plants: the ethnobiology and ethnopharmacy of human migrations* (eds) A. Pieroni & I. Vandebroek, 145–65. Oxford: Berghahn.
- CLIFFORD, J. 1988. *The predicament of culture: twentieth-century ethnography, literature and art*. Cambridge, Mass.: Harvard University Press.
- 2008. The others: beyond the ‘salvage’ paradigm. *Third Text* 3, 73–8.
- DEGNEN, C. 2009. On vegetable love: gardening, plants, and people in the north of England. *Journal of the Royal Anthropological Institute* (N.S.) 15, 151–67.
- DOVE, M.R. 2006. Indigenous people and environmental politics. *Annual Review of Anthropology* 35, 191–208.
- DRÆBEL, T. 1997. *Évaluation des besoins sociaux de la communauté déplacée de l’archipel de Chagos, volet un: santé et éducation*. Ministry of Social Security and National Solidarity, Port Louis, Mauritius/World Health Organization.
- ELLEN, R. 2006. Introduction. *Journal of the Royal Anthropological Institute* (N.S.) Special Issue: Ethnobiology and the science of humankind (ed.) R. Ellen, S1–S22.
- & R. KOMÁROMI 2013. Social exchange and vegetative propagation. *Anthropology Today* 29, 3–7.
- , P. PARKES & A. BICKER (eds) 2000. *Indigenous environmental knowledge and its transformations: critical anthropological perspectives*. London: Routledge.
- & S. PLATTEN 2011. The social life of seeds: the role of networks of relationships in the dispersal and cultural selection of plant germplasm. *Journal of the Royal Anthropological Institute* (N.S.) 17, 563–84.
- GIFFORD, R.D. & R.P. DUNNE 2014. A dispossessed people: the depopulation of the Chagos Archipelago 1965–1973. *Population, Space and Place* 20, 37–49.
- GODELIER, M. 1999. *The enigma of the gift* (trans. N. Scott). Chicago: University Press.
- GURIB-FAKIM, A. 2007. *Medicinal plants of Mauritius and of the world*. Baie du Tombeau: Graphic Press.
- 2009. *An illustrated guide to the flora of Mauritius and the Indian Ocean islands*. Reduit: University of Mauritius.
- & T. BRENDLER 2004. *Medicinal and aromatic plants of the Indian Ocean islands*. Stuttgart: Medpharm Scientific Publications.
- , M. SEWRAJ, J. GUEHO & E. DULLOO 1993. Medical ethnobotany of some weeds of Mauritius and Rodrigues. *Journal of Ethnopharmacology* 39, 175–85.
- HARRISON, R. 2013. *Heritage: critical approaches*. Milton Park, Abingdon: Routledge.
- HASELMAIR, R., H. PIRKER, E. KUHN & C.R. VOGL 2014. Personal networks: a tool for gaining insight into the transmission of knowledge about food and medicinal plants among Tyrolean (Austrian) migrants in Australia, Brazil and Peru. *Journal of Ethnobiology and Ethnomedicine* 10: 1.
- HSU, E. 2010. Plants in medical practice and common sense: on the interface of ethnobotany and medical anthropology. In *Plants, health and healing: on the interface of ethnobotany and medical anthropology* (eds) E. Hsu & S. Harris, 1–48. Oxford: Berghahn.
- JEFFERY, L. 2011. *Chagos islanders in Mauritius and the UK: forced displacement and onward migration*. Manchester: University Press.
- 2013. ‘We are the true guardians of the environment’: human–environment relations and debates about the future of the Chagos Archipelago. *Journal of the Royal Anthropological Institute* (N.S.) 19, 300–18.
- 2014. Ecological restoration in a cultural landscape: conservationist and Chagossian approaches to controlling the ‘coconut chaos’ on the Chagos Archipelago. *Human Ecology* 42, 999–1006.
- JEPSON, A. 2006. Gardens and the nature of rootedness in Cyprus. In *Divided Cyprus: modernity, history and an island in conflict* (eds) G. Welz, N. Peristianis & Y. Papadakis, 158–75. Bloomington: Indiana University Press.
- KING, R. 1986. Return migration and regional economic development: an overview. In *Return migration and regional economic problems* (ed.) R. King, 1–37. London: Croom Helm.
- LADIO, A.H. 2001. The maintenance of wild edible plant gathering in a Mapuche community of Patagonia. *Economic Botany* 55, 243–54.
- LAUER, M. & S. ASWANI 2009. Indigenous ecological knowledge as situated practices: understanding fishers’ knowledge in the Western Solomon Islands. *American Anthropologist* 111, 317–29.
- LE CHARTIER, C. 1991. *Table et traditions créoles: Île Maurice, Île Rodrigues, Agaléga, Chagos*. Mauritius: African Cultural Centre.
- LEVITT, P. 2001. *The transnational villagers*. Berkeley: University of California Press.
- & D. LAMBA-NIEVES 2011. Social remittances revisited. *Journal of Ethnic and Migration Studies* 37, 1–22.
- LOUWE, H. 1987. Traditional mother and child care in rural Mauritius. In *Contributions to Mauritian ethnography* (eds) A. Kuper & A. Kouwenhoven, 69–117. Leiden: University Press.

- MALKKI, L. 1992. National geographic: the rooting of peoples and the territorialization of national identity among scholars and refugees. *Cultural Anthropology* 7, 24-44.
- MATATIKEN, D., L. HOAREAU, M. KANTE, J. MOUGAL, P. RENE, M. ROSALIE, R. SPIRO & F. VIDOT 2011. Conservation and management of medicinal plants: experiences from Seychelles. *Asian Biotechnology Development Review* 13: 3, 61-75.
- MAUSS, M. 1990 [1924]. *The gift* (trans. W.D. Halls). London: Routledge.
- MORESBY, R. & T. ELWON 1841. *Sailing directions for the Red Sea*. London: Allen & Co.
- NAZAREA, V.D. 1996. Fields of memories as everyday resistance. *Cultural Survival Quarterly* 20: 1.
- 2006. Local knowledge and memory in biodiversity conservation. *Annual Review of Anthropology* 35, 317-35.
- OSOSKI, A.L., M.J. BALICK & D.C. DALY 2007. Medicinal plants and cultural variation across Dominican rural, urban, and transnational landscapes. In *Traveling cultures and plants: the ethnobiology and ethnopharmacy of human migrations* (eds A. Pieroni & I. Vandeboek, 14-38. Oxford: Berghahn.
- PALANISWAMY, U.R. 2007. The changing scene of health promotion and disease prevention strategies due to migration of Indians from the Asian Subcontinent to the United States. In *Traveling cultures and plants: the ethnobiology and ethnopharmacy of human migrations* (eds A. Pieroni & I. Vandeboek, 86-103. Oxford: Berghahn.
- PETRIDOU, E. 2001. The taste of home. In *Home possessions: material culture behind closed doors* (ed.) D. Miller, 87-104. Oxford: Berg.
- PIERONI, A. & I. VANDEBROEK (eds) 2007. *Traveling cultures and plants: the ethnobiology and ethnopharmacy of human migrations*. Oxford: Berghahn.
- , H. ZAMAN, S. AYUB & B. TORRY 2010. 'My doctor doesn't understand why I use them': herbal and food medicines amongst the Bangladeshi community in West Yorkshire, UK. In *Ethnobotany in the new Europe: people, health and wild plant resources* (eds M. Pardo-de-Santayana, A. Pieroni & R.K. Puri, 112-46. Oxford: Berghahn.
- PIRKER, H., R. HASELMAIR, E. KUHN, C. SCHUNKO & C.R. VOGL 2012. Transformation of traditional knowledge of medicinal plants: the case of Tyroleans (Austria) who migrated to Australia, Brazil and Peru. *Journal of Ethnobiology and Ethnomedicine* 8: 44.
- PLATTEN, S. 2013. Plant exchange and social performance: implications for knowledge transfer in British allotments. In *Understanding cultural transmission in anthropology: a critical synthesis* (eds R. Ellen, S.J. Lycette & S.E. Johns, 300-19. Oxford: Berghahn.
- REYES-GARCIA, V., J.L. MOLINA, L. CALVET-MIR, L. ACEITUNO-MATA, J.J. LASTRA, R. ONTILLERA, M. PARADA, M. PARDO-DE-SANTAYANA, M. RIGAT, J. VALLÈS & T. GARNATJE 2013. 'Tertius gaudens': germplasm exchange networks and agroecological knowledge among home gardeners in the Iberian Peninsula. *Journal of Ethnobiology and Ethnomedicine* 9: 53, 1-11.
- ROWLANDS, M.J. & F. DE JONG 2007. Reconsidering heritage and memory. In *Reclaiming heritage: alternative imaginaries of memory in West Africa* (eds F. De Jong & M.J. Rowlands, 13-30. Walnut Creek, Calif.: Left Coast Press.
- SCHMELZER, G.H. 2008. *Ochrosia oppositifolia* (Lam.) K.Schum. In *Plant resources of tropical Africa: medicinal plants* (eds G.H. Schmelzer & A. Gurib-Fakim, 391-2. Wageningen: PROTA Foundation.
- SCOTT, R. 1961. *Limuria: the lesser dependencies of Mauritius*. Oxford: University Press.
- SILLITOE, P., A. BICKER & J. POTTIER (eds) 2002. *Participating in development: approaches to indigenous knowledge*. London: Routledge.
- SMITH, L. 2006. *Uses of heritage*. New York: Routledge.
- SMITH-HALL, C., H.O. LARSEN & M. POULIOT 2012. People, plants and health: a conceptual framework for assessing changes in medicinal plant consumption. *Journal of Ethnobiology and Ethnomedicine* 8: 43, 1-11.
- STRATHERN, M. 1988. *The gender of the gift: problems with women and problems with society in Melanesia*. Berkeley: University of California Press.
- SUSSMAN, L. 1980. Herbal medicine on Mauritius. *Journal of Ethnopharmacology* 2, 259-78.
- SUTTON, D.E. 2001. *Remembrance of repasts: an anthropology of food and memory*. Oxford: Berg.
- TATAYAH, V. 2011. Status of conservation of native medicinal plants of Mauritius and Rodrigues. *Asian Biotechnology Development Review* 13: 3, 85-107.
- UNESCO 2012. Operational guidelines for the implementation of the World Heritage Convention (available on-line: <http://whc.unesco.org/archive/opguide12-en.pdf>, accessed 25 January 2016).
- VAN DER GEEST, S., S.R. WHYTE & A. HARDON 1996. The anthropology of pharmaceuticals: a biographical approach. *Annual Review of Anthropology* 25, 153-78.

- VANDEBROEK, I., M.J. BALICK, J. YUKES, L. DURÁN, F. KRONENBERG, C. WADE, A.L. OSOKSI, L. CUSHMAN, R. LANTIGUA, M. MEJÍA & L. ROBINEAU 2007. Use of medicinal plants by Dominican immigrants in New York City for the treatment of common health conditions: a comparative analysis with literature data from the Dominican Republic. In *Traveling cultures and plants: the ethnobiology and ethnopharmacy of human migrations* (eds) A. Pieroni & I. Vandebroek, 39-63. Oxford: Berghahn.
- VILADRICH, A. 2007. Between bellyaches and lucky charms: revealing Latinos' plant-healing knowledge and practices in New York City. In *Traveling cultures and plants: the ethnobiology and ethnopharmacy of human migrations* (eds) A. Pieroni & I. Vandebroek, 64-85. Oxford: Berghahn.
- VOLPATO, G., A.A. EMHAMED, S.M.L. SALEH, A. BROGLIA & S. DI LELLO 2007. Procurement of traditional remedies and transmission of medicinal knowledge among Sahrawi people displaced in southwestern Algerian refugee camps. In *Traveling cultures and plants: the ethnobiology and ethnopharmacy of human migrations* (eds) A. Pieroni & I. Vandebroek, 245-69. Oxford: Berghahn.
- WAGNER, R. 1981. *The invention of culture*. Chicago: University Press.
- WHYTE, S.R. 1988. The power of medicines in East Africa. In *The context of medicines in developing countries: studies in pharmaceutical anthropology* (eds) S. van der Geest & S.R. Whyte, 217-33. Dordrecht: Kluwer.
- , S. VAN DER GEEST & A. HARDON 2002. *Social lives of medicines*. Cambridge: University Press.

Maintenir, nourrir et cultiver : les plantes, patrimoine culturel vivant des Chagossiens dispersés à Maurice, aux Seychelles et au Royaume-Uni

Résumé

Le présent article applique aux végétaux l'approche des études critiques sur le patrimoine pour explorer la façon dont la connaissance et l'utilisation des plantes, leur échange, leur symbolisme et leur matérialité s'inscrivent dans la vie sociale de la diaspora chagossienne à Maurice, aux Seychelles et au Royaume-Uni. Premièrement, l'utilisation des plantes sert à maintenir le savoir collectif dans de nouvelles conditions d'environnement et de nouveaux cadres sociaux. Deuxièmement, l'échange de plantes nourrit les liens de parenté et autres relations sociales avec la communauté élargie. Troisièmement, le symbolisme et la matérialité des plantes cultivent des liens nostalgiques avec un pays natal idéalisé dans un contexte de dispersion diasporique. Il n'en reste pas moins que la contribution des plantes à ces processus sociaux est limitée par les obstacles à la transmission intergénérationnelle du savoir dans le temps et l'espace et par les restrictions écologiques, financières et réglementaires opposées à la migration des végétaux. L'article fait valoir que pour la communauté chagossienne déplacée, les plantes sont un patrimoine culturel vivant ayant un potentiel social (si restreint soit-il) dans un contexte de dislocation et de perte, de souffrance encore vive et de dispersion géographique.

Laura Jeffery is Lecturer in Social Anthropology at the University of Edinburgh. She held an Economic and Social Research Council Research Fellowship (RES-063-27-0214) focusing on debates about environmental knowledge concerning the Chagos Archipelago. She is author of *Chagos islanders in Mauritius and the UK: forced displacement and onward migration* (Manchester University Press, 2011).

School of Social and Political Science, University of Edinburgh, Chrystal Macmillan Building, 15a George Square, Edinburgh EH8 9LD, UK. Laura.Jeffery@ed.ac.uk

Rebecca Rotter was Research Assistant on the Economic and Social Research Council Research Fellowship RES-063-27-0214 (University of Edinburgh). She has conducted research on asylum seekers' experiences of indefinite waiting in the asylum process (at the University of Edinburgh), and consistency and fairness in the asylum appeals process (at the University of Exeter).

School of History, Classics and Archaeology, University of Edinburgh, William Robertson Wing, Old Medical School, Teviot Place, Edinburgh EH8 9AG, UK. R.Rotter@ed.ac.uk